# The agricultural sector value chain in bangladesh economics essay

**Economics** 



### 1. Introduction

In the context of a country with high level of GDP growth, progressive and evident urbanization but still low employment options; the agriculture sector is still one of the biggest employment generator. Although, sectoral composition of Bangladesh economy is changing in recent years from the post liberation era, industrial and service sectoral composition to GDP is increasing in recent years with a minimal decline in agriculture. Agriculture still contributes 18, 8% of GDP (Bangladesh Bureau of Statistics, 2008). In saying so, almost two-third of rural Bangladesh is still heavily dependent on an agrarian economy and almost 25% of gross national product comes out from this sector (BSS, 2010). More than 60% of the land area of Bangladesh is used for agriculture activities (BSS, 2010). Most farmers however are engaged into the production of rice as they are not adaptable to proper agriculture information to understand the benefits of " high value crops" or the benefits driven from horticulture production. In recent years there has been considerable interest by different civil society organizations along with scholars in trying to improve the economic wellbeing of marginalized farmers by encouraging them to grow high-valued cash crops as part of value chain enterprise, linking them to global retailers or production networks (Prahald and Stuart, 2010). Value chain enterprises are intended to develop a total link between producer and consumer or at least to the agrarian industrial process. The agricultural value chain in Bangladesh is still on process of development, the cultivation techniques are mostly traditional, with production yields still with room of improvement. Minimum access to agricultural extension services, even having a very well trained personal and

national system created by the government. The transportations services in the villages are very basic, time demanding and the roads in the villages are poorly maintained, but better when are near to the cities. The processing services in the villages and in the inland cities utilize old machines, with an exception of milk and rice processing (Bangladesh Rice Research Institute 2009; Bangladesh Institute of Development Studies, 2009). The farmers interact in the market individually, with almost no market information and very limited bargaining power, dealing with the middlemen, suppliers and moneylenders who have better connection with market forces. When farmers take their outputs to the wholesalers, they stand as agents who define the prices and the conditions for selling and buying. On the process these middlemen and wholesalers developed a complex network of informants and collectors in the villages; leading to monopoly (CARE Bangladesh, 2011; Practical Action, 2010; IDE, 2011). The most important challenges that the farmers are facing are related with the lacking of agricultural extension services, the limited and almost inexistent market information on the field, the costly credit from money lender, the variability of the prices and because of the small volume produced and individual market intervention, the limited bargaining power (IIED, 2010). Specific activities could generate benefits in a short time. The production of horticulture at large scale, the aggregation of the farmers' or even production of garden vegetables within a homestead, offers a possibility to reach regional markets (the biggest one in the capital city) will impact immediately in the profitability of the activity. Also homestead production could increase not only the family income, but the positioning of dietary balance or help towards being more food secured. The

consumer inland and also in the capital city prefer to buy in the kitchen markets. However, there is a growing demand for supermarket chains and few are already present in major cities, but the concept is growing slowly beyond the capital city. The crescent urbanization and the people who are working in other sectors, different to agriculture, have been increasing the demand, not only in volumes, but also in the quality of the products. This condition even in the current situation makes it feasible to improve the position of the farmers in the value chain. Addressing the challenges that farmers are facing, will impact directly in improving their market position. Farmers' organization, market information, agricultural extension, access to credit and private sector engagement are key factors in a successful participation of the farmers in the market (Dorward et al, 2004).

# 2. Study objective

The agrarian structure of Bangladesh have mostly been dominated by marginal and small holding farmers, for which economic progress and people's livelihood have always been affected through the existence of agriculture well-being. It is worth mentioning here that according to (BSS, 2005) the households holding 5-49 decimals of land are considered to be marginal farm sized holding and the households owning 50-249 decimals of land are considered to be small holding farm sized. However, according to baseline census conducted by CARE Bangladesh in 2010, extreme poor household farmers approximately own 7. 3 decimals of agriculture land and poor household farmers own 16. 3 decimals of agriculture land in addition to their homestead land, both of whom are considered as small holding farmers. Agriculture has the potential to reduce food deficit as well as

shortage of industrial raw materials, and also to generate employment opportunities with reasonable income, which will in turn help improve the rural people's living standard (Ellis, 2010; Dorward et al, 2004). Henceforth, analyzing on agriculture value-chains for the high value crop can be a means to reduce food insecurity and improving livelihood opportunities for small-holding farmers. The present study aims to analyze the rural agricultural value chain characteristics in Bangladesh. On the process identify high value crops that are capable to be developed under the characteristics of families in poverty and have potential profitable rates and market availability (to super stores or other private sector linkages). Explore opportunities and constraints in the value chain in which the small holding farmers have an opportunity to participate and successfully lead the market. Analyze constrains and opportunities for woman participation in selected crop value chains.

# 3. Methodology

The research will be based both on primary and secondary information for analyzing the data that can be witnessed in the paper. Relevant secondary information that will be collected will help to contextualize information for streaming the research analysis. An overview of the global production networks in accordance to social enterprises will be sited. These evidences will be based upon the new concept of social enterprise and revamping of the agriculture sector through means of NGO-Business partnerships will be visited. The increasing participation of private sector actors into agriculture will be carefully assessed based on (Ellis, 1988; Lodhi, 2008; Lefebvre, 2008; Wheeler et. al, 2005; Bruggman and Prahalad 2007; Yunus, 2001) papers.

The expected study will be based in Product Value Chain Analysis Methodology, which mainly analyzes the whole product value chain and each of its specific actors; aiming to identify opportunities where actors under poverty can successfully participate. For the actor-wise product analysis, secondary resources will be based in accordance to different NGOs and civil society organizations that have set agriculture value chain models which are currently under operation in different parts of the world along with Bangladesh; like IDE-UK, CARE International UK, USAID- Feed the Future, BRAC, ActionAid Bangladesh, Oxfam Bangladesh, Practical Action and WFP Bangladesh. At the same instance, reports published by research institutions (CYMMIT and IRRI) and agriculture university in Bangladesh will be studied to view on the current trends of improving crop productivity and diversion of agriculture research into high valued crops apart from traditional crops like rice and paddy. Furthermore, new technology on production methods will be acknowledge from the research conducted by Bangladesh Agriculture University in 2010-2011 that is improving crop production through intercropping and multi-cropping techniques. These techniques help small scale farmers to take their production upscale that aids into meeting value chain needs. Most importantly, secondary data will reveal on the Agriculture Policy of Bangladesh that has changed in the year 2010 as part of the National Development Plan. Viability of agriculture value chain in Bangladesh needs to be mapped out from the secondary sources, since all crops will not be suitable for up scaling in all regions of Bangladesh. Thus, the Product Based Value Chain Methodology technique will map out the potential areas for growth of commercial crops.

### 3. 1 The agricultural sector value chain in Bangladesh

To reduce rural poverty and improve rural livelihoods, it is necessary to recognize and to develop an existing agricultural production system into a more dynamic and viable commercial sector (Annual Reports of various projects from CARE Bangladesh, 2010-2011; Annual Report BRAC, 2010; Annual Report ADB, 2010-2011). The growth potential of most of the crops and other agricultural commodities are substantially higher than present level of production (Bangladesh Agriculture University, 2012). The database of Horticulture Export Association (HORTEX) in Bangladesh can be a good help in selecting the potential areas for horticulture growth over the years. According to HORTEX and EPB (Export Promotion Bureau, 2011) data, it shows that there has been a rise of 66% in the export of vegetables from Bangladesh from 2004-2011. "The major export market comprises UK (46%), Italy (8%), other EU countries (3%) and Middle East countries (43%). More than 50 fresh fruits and vegetables are exported to UK alone. Exports are targeted for ethnic market. Besides, fresh horticulture products, frozen products exported accounts for about 250-300 tons at a value of about USD 3 million for both ethnic and mainstream markets" (HORTEX, 2011). The major challenges for the Bangladesh agriculture are to raise productivity and profitability, reducing instability, increasing resource-use efficiency, ensuring equity, improving quality; and meeting demands for diversification & commercialization of agriculture.

# 3. 2 Agricultural policy in Bangladesh

In 2006 the overall objective of the Government Policy was defined as: "To make the nation self-sufficient in food through increasing production of all https://assignbuster.com/the-agricultural-sector-value-chain-in-bangladesheconomics-essay/

crops, including cereals, and ensure a dependable food security system for all" In 2010 the policy " ... aims at creating an enabling environment for sustainable growth of agriculture for reducing poverty and ensuring food security through increased crop production and employment opportunity ..." It is clear the different focus of the policy in 2006 (self sufficiency in food production) and in 2010 sustainable growth, reducing poverty and food security. This shows the results of reaching the production self sufficiency and increasing the development approach which is leading to a more production efficiency and market focus. The specific objectives of the Bangladesh agricultural policy are: Developing and harnessing improved technologies through research and training; Increasing productivity and generating income and employment by transferring appropriate technologies and managing inputs; Promoting competitiveness through commercialization of agriculture; andEstablishing a self-reliant and sustainable agriculture adaptive to climate change and responsive to farmers needs

# 3. 3 Primary data collection methodology

For primary data collection participatory tools will be used. Data collection will be done directly from the actors living in the areas where the study will be conducted. It is suggested that 4-5 geographical locations can be targeted (northern, north-west, north-east, south and south-east) where different NGOs and Private Enterprises are working towards rural agriculture sourcing. Out of these targeted areas 10-12 districts can be selected and others be omitted from secondary data sources. HOTEX's database can be a useful tool in determining the areas of horticulture growth. Amongst the selected 10-12 districts, 1 village has been surveyed. These villages can be https://assignbuster.com/the-agricultural-sector-value-chain-in-bangladesh-economics-essay/

targeted on the fact that there is a good practice of farming activities and intervening into their existing agriculture production system will make it a viable and suitable horticulture production sector that will generate better income opportunities. After determining the potential areas where the surveys will be conducted, the strategic actors for focused group discussion and other participatory tools like conducting a questionnaire survey can be indentified. The focused group discussions can include six (6) members each time the discussions take place. The team of 6 will have three (3) individuals from extreme poor community, two (2) individuals from poor community and one (1) individual from non Poor and Extreme Poor community. The reason behind taking a diverse group of people every time the FGDs are conducted was to get a complete view of all high value crops suitable for poor or extreme poor households/individuals for intervention into the value chain. The FGDs will be conducted mainly on the farmers; however, there will be individual questionnaire survey directed towards input providers (fertilizers, pest control and seed suppliers, etc), manufacturer & processor, wholesalers and the retailers. The questionnaire surveys can be conducted at the village, regional and national level to get a complete picture on the value chain analysis. During the FGDs the technique to collect information from the field will mostly be based on "Talking Maps". Taking maps is a data collection tool that uses a graphical interface which helps to visually facilitate the data collection in a way that people who were interviewed create a parallel reality on the paper. Wherever necessary, to validate data information, interviews may be conducted with different stakeholders involved within the existing system.

## 4. Data Analysis procedure

After completion of data collection, data consistency and consolidation process needs to be carried out where the crops will be analyzed on the basis of profitability, product suitability in specific regions, and women's adaptability/feasibility in producing few crops that may give them marketability. These analyses will be done through SPSS test statistics. The profitability analysis includes economic profit where the margin percentage will been calculated, taking into consideration of the cost of input supplies and the rate at which the product is sold. While considering the profitability factor, IRR will be a core basis of measuring profitability as the return on investment is what will be a prime factor for the farmers to reinvest into the same product the following years. Under the product suitability factor, the factor will be weighted against other factors like- market for that product, risk factor, land size, food security, employment generator, seasonality, soil fertility, etc. Similarly when the factor of women's adaptability in producing crops is taken under consideration, it will be weighted on factors like income generation, resource appropriation and power positioning for women.

### **Ethics**

The place where the research is proposed to be conducted is in rural Bangladesh where risk is very minimal. Health hazard persists only if vaccinations are not taken.

# **Budget**

Costs associated in travelling, accommodation and food for the time of the survey, which should not be more than 2 weeks.

### **Conclusion**

The agricultural value chain works in general is a traditional mode, the production technology, the transportation services, the local and regional processing and the mechanism to sell are still not using modern technologies, that needs to be indentified and link up with the market actors who are involved into research of these technologies and systematically manage the market forces. For initiating global chains or local superstores to source products from the farmlands, position of farmers in the value chain will have to be strengthened. They have limited access to information, financial and technical services for which product diversion into the production of horticulture is avoided by most farmers.